11. Valentines

Program Name: Valentines.java Input File: valentines.dat

Mr. Stapleton is a fifth grade elementary school teacher. He is making plans for the fifth grade students to run a post office for the fourth graders to use to mail valentines to their friends to be delivered on Valentine's Day. The fourth grade students will design and make valentine cards and then "mail" them through the fifth graders "post office". The fourth grade students will also design and make "money" to use to mail their valentines.

Since you have a talent for computer programming, you have been asked to write a program that will compute the amount of "money" each student will owe to "mail" their valentines. Your classmates have decided on the following rates to charge the fourth graders:

- 5 cents Small valentines less than 3" x 5"
- 7 cents Medium valentines larger than small but less than 5" x 7"
- 9 cents Large valentines larger than medium but less than 8½" x 11"

Input

The first line of input will contain a single integer n that indicates the number of students to follow. Each of the following n lines will each contain a student's first name with no spaces followed by a space and three integers in the form s m 1 where s is the number of small valentines the student will mail, m is the number of medium sized valentines, and 1 is the number of large valentines that the student will mail.

Output

For each student, in the order listed in the input file, you will print on a line the student's name and a space followed by the total amount of "money" owed as dollar and cents in the form \$dd.cc. If the number of dollars is greater than zero, do not print any leading zeroes but if the amount is less than one dollar, include the zero for the dollar amount (e.g. \$0.76).

Example Input File

5 George 5 10 3 Mary 4 7 12 Rick 15 12 16 Anne 2 3 5 Liz 21 4 12

Example Output to Screen

George \$1.22 Mary \$1.77 Rick \$3.03 Anne \$0.76 Liz \$2.41